§ 3275.12 What environmental and safety requirements apply to facility operations?

- (a) You must perform all utilization facility operations in a manner that:
- (1) Protects the quality of surface and subsurface waters, air, and other natural resources, including wildlife, soil, vegetation, and natural history;
- (2) Prevents unnecessary or undue degradation of the lands;
- (3) Protects the quality of cultural, scenic, and recreational resources;
- (4) Accommodates other land uses as much as possible;
 - (5) Minimizes noise;
 - (6) Prevents injury; and
 - (7) Prevents damage to property.
- (b) You must monitor facility operations to identify and address local environmental resources and concerns associated with your facility or lease operations.
- (c) You must remove or, with BLM approval, properly store all equipment and materials not in use.
- (d) You must properly abandon the facility and reclaim any disturbed surface to standards approved or prescribed by us, when the land is no longer needed for facility construction or operation.
- (e) When we require, you must submit a contingency plan describing procedures to protect public health and safety, property, and the environment.
- (f) You must comply with the requirements of § 3200.4.

§ 3275.13 How must the facility operator measure the geothermal resources?

The facility operator must:

- (a) Measure all production, injection and utilization in accordance with methods and standards approved by BLM (see §3275.15);
- (b) Maintain and test all metering equipment. If your equipment is defective or out of tolerance, you must promptly recalibrate, repair, or replace it; and
- (c) Determine the amount of production and/or utilization in accordance with methods and procedures approved by BLM (see § 3275.17).

§ 3275.14 What aspects of my geothermal operations must I measure?

- (a) For all well operations, you must measure wellhead flow, wellhead temperature, and wellhead pressure.
- (b) For all electrical generation facilities, you must measure:
- (1) Steam and/or hot water flow entering the facility:
- (2) Temperature of the water and/or steam entering the facility;
- (3) Pressure of the water and/or steam entering the facility;
- (4) Gross electricity generated;
- (5) Net electricity at the facility tailgate;
- (6) Electricity delivered to the sales point; and
- (7) Temperature of the steam and/or hot water exiting the facility.
- (c) For direct use facilities, you must measure:
- (1) Flow of steam and/or hot water; and
- (2) Temperature of the steam or water entering the facility.
- (d) We may also require additional measurements, depending on the type of facility, the type and quality of the resource, and the terms of the sales contract.

§ 3275.15 How accurately must I measure my production and utilization?

- It depends on whether you use a meter to calculate Federal production or royalty, and what quantity of resource you are measuring.
- (a) For meters that you use to calculate Federal royalty:
- (1) If the meter measures electricity, it must have an accuracy of $\pm 0.25\%$ or better of reading;
- (2) If the meter measures steam flowing at more than 100,000 lbs/hr on a monthly basis, it must have an accuracy reading of ±2 percent or better;
- (3) If the meter measures steam flowing at less than 100,000 lbs/hr on a monthly basis, it must have an accuracy reading of ±4 percent or better;
- (4) If the meter measures water flowing at more than 500,000 lbs/hr on a monthly basis, it must have an accuracy reading of ±2 percent or better;
- (5) If the meter measures water flowing at 500,000 lbs/hr or less on a monthly basis, it must have an accuracy reading of ± 4 percent or better;

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- (6) If the meter measures heat content, it must have an accuracy reading of ±4 percent, or better; or
- (7) If the meter measures two-phase flow at any rate, BLM will determine and inform you of the meter accuracy requirements. You must obtain our prior written approval before installing and using meters for two-phase flow.
- (b) Any meters that you do not use to calculate Federal royalty are considered production meters, which must maintain an accuracy of ± 5 percent or better.
- (c) We may modify these requirements as necessary to protect the interests of the United States.

§ 3275.16 What standards apply to installing and maintaining meters?

- (a) You must install and maintain all meters that we require, either according to the manufacturer's recommendations and specifications or paragraphs (b) through (e) of this section, whichever are more restrictive.
- (b) If you use an orifice plate to calculate Federal royalty, the orifice plate installation must comply with "API Manual of Petroleum Measurement Standards, Chapter 14, Section 3, Part 2, Fourth Edition, April 2000."
- (c) For meters used to calculate Federal royalty, you must calibrate the meter against a known standard as follows:
- (1) You must annually calibrate meters measuring electricity;
- (2) You must calibrate meters measuring steam or hot water flow with a turbine, vortex, ultrasonics, or other linear devices, every 6 months, or as recommended by the manufacturer, whichever is more frequent; and
- (3) You must calibrate meters measuring steam or hot water flow with an orifice plate, venturi, pitot tube, or other differential device, every month, and you must inspect and repair the primary device (orifice plate, venturi, pitot tube) annually.
- (d) You must use calibration equipment that is more accurate than the equipment you are calibrating.
- (e) BLM may modify any of these requirements as necessary to protect the resources of the United States.

§ 3275.17 What must I do if I find an error in a meter?

- (a) If you find an error in a meter used to calculate Federal royalty, you must correct the error immediately and notify BLM by the next working day of its discovery.
- (b) If the meter is not used to calculate Federal royalty, you must correct the error and notify us within 3 working days after its discovery.
- (c) If correcting the error will cause a change in the sales quantity of more than 2 percent for the month(s) in which the error occurred, you must adjust the sales quantity for that month(s) and submit an amended facility report to us within 3 working days.

§ 3275.18 May BLM require me to test for byproducts associated with geothermal resource production?

You must conduct any tests we require, including tests for byproducts, if we find it necessary to require such tests for a given operation.

§ 3275.19 How do I apply to commingle production?

To request approval to commingle production, send us a completed and signed Sundry Notice. We will review your request to commingle production from wells on your lease with production from your other leases or from leases where you do not have an interest. Do not commingle production until we have approved your Sundry Notice.

§ 3275.20 What will BLM do if I waste geothermal resources?

We will determine the amount of any resources you have lost through waste. If you did not take all reasonable precautions to prevent waste, we will require you to pay compensation based on the value of the lost production. If BLM finds that you have not adequately corrected the situation, we will follow the noncompliance procedures in § 3277.12.

§ 3275.21 May BLM order me to drill and produce wells on my lease?

BLM may order you to drill and produce wells on your lease when we find it necessary to protect Federal interests, prevent drainage, or ensure that lease development and production